

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.   | FILING DATE          | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------------|----------------------|---------------------|------------------|
| 10/536,841  | 05/31/2005           | Andrea Giraldo       | NL 021321           | 6507             |
| 24737 7590 12/11/2007<br>PHILIPS INTELLECTUAL PROPERTY & STANDARDS<br>P.O. BOX 3001 |                      |                      | EXAMINER            |                  |
|   |                      |                      | MA, CALVIN          |                  |
| BRIARCLIFF  | LIFF MANOR, NY 10510 |                      | ART UNIT            | PAPER NUMBER     |
|   |                      |                      | 2629                |                  |
|   |                      |                      |                     |                  |
|   |                      |                      | MAIL DATE           | DELIVERY MODE    |
|   |                      |                      | 12/11/2007          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  |  | Application No.   | Applicant(s)  |  |  |  |  |
|--|--|---|---|--|--|--|--|
| Office Action Summary  |  | 10/536,841  | GIRALDO ET AL.  |  |  |  |  |
|  |  | Examiner  | Art Unit  |  |  |  |  |
|  |  | Calvin Ma   | 2629  |  |  |  |  |
|  | The MAILING DATE of this communication app   | pears on the cover sheet with the c   | correspondence address  |  |  |  |  |
| Period fo  |  | ( 10 055 70 5\\D)DE - 140\\T\   | (O) OD THIDTY (OO) DAY(O  |  |  |  |  |
| WHIC<br>- Exter<br>after<br>- If NO<br>- Failu<br>Any (  | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE IN THE MAIL | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE | N.<br>nely filed<br>the mailing date of this communication.<br>D (35 U.S.C. § 133). |  |  |  |  |
| Status   |  |   |   |  |  |  |  |
| 1)⊠  | Responsive to communication(s) filed on 31 M   | <i>ay 2005</i> .  |   |  |  |  |  |
| , —  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.   |   |   |  |  |  |  |
| 3)   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |   |   |  |  |  |  |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |   |   |  |  |  |  |
| Dispositi  | on of Claims   |   |   |  |  |  |  |
| 4) 🖂   | 4)⊠ Claim(s) <u>1-13</u> is/are pending in the application.  |   |   |  |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |   |  |  |  |  |
| 5)   | 5) Claim(s) is/are allowed.  |   |   |  |  |  |  |
|  | Claim(s) <u>1-13</u> is/are rejected.  |   |   |  |  |  |  |
| •  | Claim(s) is/are objected to.   | l   |   |  |  |  |  |
| 8)[_   | Claim(s) are subject to restriction and/o  | r election requirement.   |   |  |  |  |  |
| Applicati  | on Papers  |   |   |  |  |  |  |
| 9)🖂  | The specification is objected to by the Examine  | r.  |   |  |  |  |  |
| 10)⊠   | The drawing(s) filed on 31 May 2005 is/are: a)   | ☑ accepted or b) ☐ objected to  | by the Examiner.  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |   |   |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. |  |   |   |  |  |  |  |
| 11)  | The oath or declaration is objected to by the Ex   | caminer. Note the attached Office   | Action of form PTO-152.   |  |  |  |  |
| Priority ι   | ınder 35 U.S.C. § 119  |   |   |  |  |  |  |
|  | Acknowledgment is made of a claim for foreign<br>⊠ All b)  Some * c)  None of:   | priority under 35 U.S.C. § 119(a  | )-(d) or (f).   |  |  |  |  |
|  | 1. ☑ Certified copies of the priority documents have been received.  |   |   |  |  |  |  |
|  | 2. Certified copies of the priority documents have been received in Application No   |   |   |  |  |  |  |
|  | 3. Copies of the certified copies of the prior   |   | ed in this National Stage   |  |  |  |  |
|  | application from the International Bureau  | •   |   |  |  |  |  |
| * 5  | See the attached detailed Office action for a list   | of the certified copies not receive   | ea.   |  |  |  |  |
| Attachmen  | t(s)   |   |   |  |  |  |  |
|  | e of References Cited (PTO-892)  | 4) Interview Summary<br>Paper No(s)/Mail D  |   |  |  |  |  |
| 3) 🔯 Infor   | e of Draftsperson's Patent Drawing Review (PTO-948)<br>mation Disclosure Statement(s) (PTO/SB/08)<br>r No(s)/Mail Date <u>05/31/2005,05/30/2006</u> .  | 5) Notice of Informal F   |   |  |  |  |  |

#### **DETAILED ACTION**

## **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### Information Disclosure Statement

2. The references listed on the Information Disclosure Statements filed on May 30, 2006, and May 31, 2005 have been considered by examiner; see attached PTO-1449.

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 3-8, and 10-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Each of the above mentioned claims refers to claim 0 which does not exist, and could not be appropriately reconstructed. Thus claims 3-8 and 10-13 are not further treated on merit.

### Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Application/Control Number:

10/536,841 Art Unit: 2629

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-2, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsutsui. (US Patent: 7,053,873)

As to claim 1, Tsutsui discloses 1. A pixel cell (i.e. GS1-GS12) (see Fig. 2, Col. 4, Lines 29-33) in an active matrix display (i.e. the TFT driven display system is an active matrix design) comprising a current driven emissive element (46) (see Fig. 14, Col. 9, Lines 10-32), a data input (STB) for receiving an analogue data signal (A0) (i.e. the analog input A0 is inputted into the three switches in figure 5 which can be adopted by the fifth embodiment in figure 14) (see Fig. 5, Col. 5, Lines 60 - Col. 6, Lines 15), at least two drive elements (TT0,TT1, TT2), each being connected to a power supply (i.e. the entire array is ultimately connected to the driving voltage VDD and is in turn connected to the power supply of the entire display which must have electrical power to operate) and arranged to drive the emissive element (20) in accordance with said data signal (A0), selecting means (i.e. the gate transistor switches GT0, GT1, GT2) for providing, in response to a select signal (A0), said data signal (A0) to at least one of said drive elements (TT0, TT1, TT2), wherein each drive element (TT0, TT1, TT2) is adapted to drive the emissive element (46) in a different drive current range in response to a given data signal (A0) (i.e. since the variable capacitance of C0, C1, C2, each of

Application/Control Number:

10/536,841

Art Unit: 2629

the driving element TT0, TT1, TT2 have different response but is ultimately controlled by the A0 analog signal) (see Fig. 14, Col. 9, Lines 10-62).

As to claim 9, Tsutsui teaches a method for driving a pixel cell comprising an emissive element (46) and at least two drive elements (TT0, TT1, TT2) for driving the emissive element, each drive element (TT0, TT1, TT2) being adapted to drive the emissive element (46) in a different drive current range (i.e. since the three diving element each have different capacitance values and is adopted originally to response differently, they have different driving range according to the variation to the capacitance) in response to a given data signal (A0) (see Fig. 5, Col. 5, Lines 60 – Col. 6, Lines 15) said method comprising:

based on an analogue video signal (A0) belonging to a first voltage range, generating a data signal (i.e. the voltage at 44 where the combined 3 element create a singe voltage) belonging to a second, more narrow voltage range, and associating said data signal with a select signal (G1) indicating a desired drive current range (i.e. the resulting voltage is more narrow at point 44 since the capacitors C0, C1, C2 is able to absorb the transient responses and create a more stable signals), and providing said data signal (i.e. Voltage at 44) to a drive element in the pixel cell (GS1-12) capable of driving the emissive element (46) in the desired drive current range(see Fig. 14, Col. 9, Lines 10-62).

10/536,841

Art Unit: 2629

As to claim 2, Tsutsui teaches a pixel cell according to claim 1, wherein said selecting means comprises at least two switches (i.e. the three switches that selects the signals A0 or D), each arranged to be provided with a separate select signal (i.e. the three switches are separate and provide the signal to GT0, GT1, GT2 corresponding to it), said select signal thereby determining the drive current range resulting from a given data signal (A0) (i.e. the analog input A0 is inputted into the three switches in figure 5 which can be adopted by the fifth embodiment in figure 14) (see Fig. 5, Col. 5, Lines 60 – Col. 6, Lines 15).

# Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miyajima et al. (US Patent: 6,853,371) is cited to teach a multi-selection circuitry that is adapted to LCD system. Yumoto (US Patent: 6,859,193) is cited to teach a dual scanning OLED system. Okamato (US Pub: 2002/0140642) is cited to teach a multi-select OLED display system.

### Inquiry -

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Calvin Ma whose telephone number is (571) 270-1713. The examiner can normally be reached on Monday - Friday 7:30 - 5:00 EST.

Application/Control Number:

10/536,841

Art Unit: 2629

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Calvin Ma
December 3, 2007

CHANH D. NGUYEN V SUPERVISORY PATENT EXAMINER